

Job No: IAC-446

17 April 2016

**HEALTH INFRASTRUCTURE
LEVEL 6, 77 PACIFIC HIGHWAY
NORTH SYDNEY NSW 2060**REFERENCE: NSW FORENSIC PATHOLOGY AND CORONERS COURT
DOCUMENTATION REVIEW
ATTENTION: MR AARON SMITH

Dear Aaron,

As per your instructions we have undertaken a desktop high level review of the documentation prepared for the NSW Forensic Pathology and Coroners Court project. The focus of our review was to review the documentation prepared as far as completeness of the documentation.

We have been provided with the architectural plans only. It will be essential to coordinate the layout of the design with the various engineering disciplines.

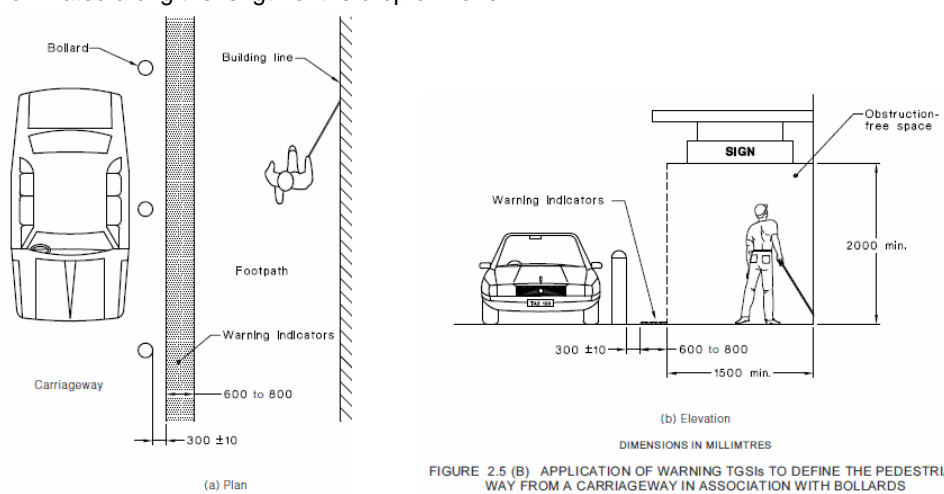
We must state that we have identified a number of issues in this review however we have not captured all coordination of services issues.

We will be happy to meet with your design team to go through any aspect of our review.

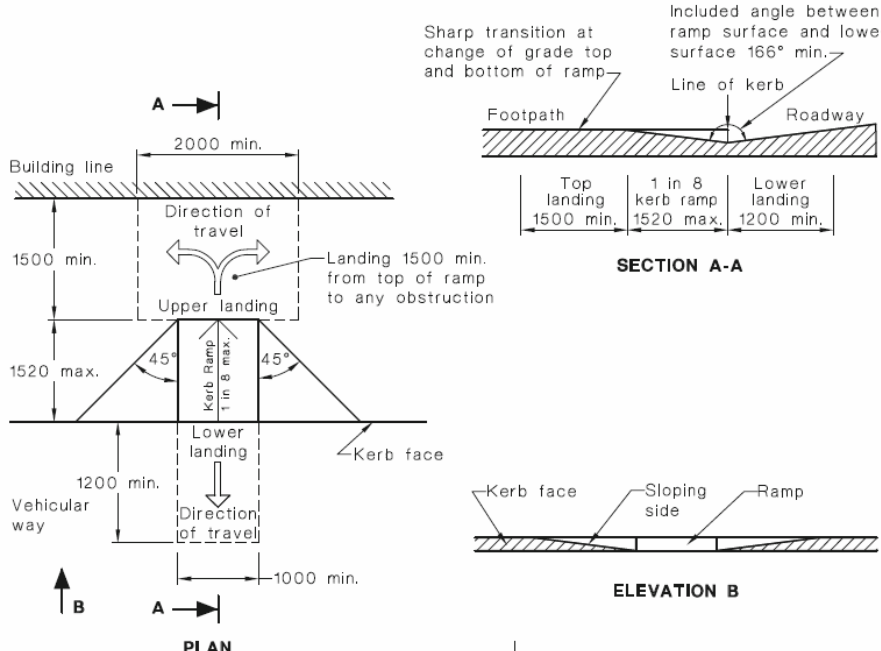
Yours sincerely,

**RICHARD SEIDMAN**M.PropDev, BArch (Hons),
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ACAA (Associate No 330)
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Documentation Review				
No	DWG No	Room	Discussion	Action
1.	SD-003		What is the gradient of the ramp immediately adjacent to the public drop off zone?	Item to be developed under design development.
2.	SD-003		Is the roadway at the same level as the pavement at the public drop off point?	Level.
3.	SD-003		<p>If the drive and pavement are at the same grade, then TGSIs and bollards will need to be nominated along the length of the drop off zone.</p>  <p style="text-align: center;">DIMENSIONS IN MILLIMETRES</p> <p style="text-align: center;">FIGURE 2.5 (B) APPLICATION OF WARNING TGSIs TO DEFINE THE PEDESTRIAN WAY FROM A CARRIAGEWAY IN ASSOCIATION WITH BOLLARDS</p>	Noted. Item to be developed under design development.
4.	SD-003		If there is a kerb separating the pavement and the roadway, then a kerb ramp compliant to Clause 10.7 of AS1428.1:2009 will need to be nominated to transition from the roadway to the pavement.	Noted. Item to be developed under design development.

Documentation Review

No	DWG No	Room	Discussion	Action
5.	SD-003		 <p>Sharp transition at change of grade top and bottom of ramp</p> <p>Included angle between ramp surface and lower surface 166° min.</p> <p>Line of kerb</p> <p>Footpath</p> <p>Roadway</p> <p>Top landing 1500 min.</p> <p>1 in 8 kerb ramp 1520 max.</p> <p>Lower landing 1200 min.</p> <p>SECTION A-A</p> <p>Building line 2000 min.</p> <p>Direction of travel</p> <p>1500 min.</p> <p>Landing 1500 min. from top of ramp to any obstruction</p> <p>Upper landing</p> <p>1520 max.</p> <p>45°</p> <p>Kerb Ramp 1 in 8 max.</p> <p>45°</p> <p>Kerb face</p> <p>Lower landing</p> <p>1200 min.</p> <p>Vehicular way</p> <p>Direction of travel</p> <p>1000 min.</p> <p>PLAN</p> <p>Kerb face</p> <p>Sloping side</p> <p>Ramp</p> <p>ELEVATION B</p>	Noted. Item to be developed under design development.

Documentation Review				
No	DWG No	Room	Discussion	Action
6.	SD-003		<p>Should a wheelchair setdown zone be nominated. If so the parking zone for parallel parking will need to satisfy Clause 2.2.2 parallel parking of AS2890.6:2009.</p> <p>FIGURE 2.5 EXAMPLE OF A PARALLEL PARKING SPACE WITH SHARED AREA AT SAME LEVEL—DIMENSIONS FOR AUSTRALIA ONLY*</p> <p>DIMENSIONS IN MILLIMETRES</p>	Noted. Item to be developed under design development.

Documentation Review				
No	DWG No	Room	Discussion	Action
7.	SD-003		<p>What is the gradient of the ramp connecting the entry to the Public Police parking area? It appears the gradient is not steeper than 1:20? Attention is directed to the detail of Clause 10 of AS1428.1:2009.</p> <p>Specific attention is directed to:</p> <ul style="list-style-type: none"> • Slip resistance of pavement finishes • Positioning of landings • Handrails and handrail extensions • TGSIs • Lighting (150 lx) 	1:20 is achieved. Item to be developed under design development.
8.	SD-003		<p>Parking spaces</p> <p>The line marking of the general parking spaces will need to satisfy the requirements of Clause 4.4 of AS2890.1:2004.</p> <p><i>Parking spaces other than those for people with disabilities shall be delineated by means of white or yellow lines 80 to 100 mm wide, or white or yellow pavement markers in one or other of the forms and patterns illustrated in Figure 4.1 for angle parking or Figure 4.2 for parallel parking.</i></p>	Noted. Item to be developed under design development.
9.	SD-003		<p>Accessible parking spaces – Public & Police Parking</p> <p>The plan nominates 2 accessible parking spaces adjacent to the ramp connecting to the entry. The number of parking spaces satisfies the requirements of NCC Clause D3.5.</p> <p>The line marking of the accessible parking space will need to satisfy the requirements of Section 3 of AS2890.6:2009. Refer to attached technical sheet for line marking details.</p>	Noted. Item to be developed under design development.
10.	SD-003		<p>Accessible parking spaces – Staff Parking</p> <p>The plan nominates 1 accessible parking space adjacent to the staff entry. The number of parking spaces will need to be reviewed against the requirements of NCC Clause D3.5. A total of 111 staff parking spaces are provided. NCC Table D3.5 requires for NCC Building Classifications Class 5 and Class 9b that accessible parking be provided at the rate of 1 space for every 100 parking spaces. In this instance the accessible parking spaces provided will need to be increased by 1 parking space to satisfy this requirement. There is no impact on the parking arrangements in satisfying this requirement.</p> <p>The line marking of the accessible parking space will need to satisfy the requirements of Section 3 of AS2890.6:2009. Refer to attached technical sheet for line marking details.</p>	Noted. Item to be developed under design development.

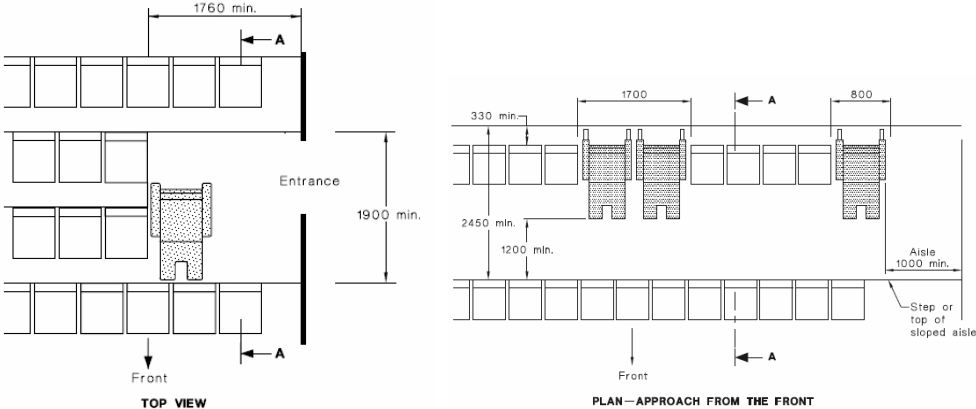
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11.	SD-003		Kerb ramps will need to be provided to connect the roadway to the pavement path of travel to the entry.	Noted. Item to be developed under design development.
12.	SD-003		What is the detail of the security fencing, gates and pedestrian access between the carparks?	Palisade fencing with a turnstile pedestrian gate.
13.	SD-003		What is the gradient of the vehicle ramp between the two carparks?	Refer to civil drawings
14.	SD-003		<p>Confirm that the gradients across the parking area satisfy Clause 2.4.6 of AS2890.1:2004.</p> <p>2.4.6.1 Maximum gradients</p> <p><i>The maximum gradients within a parking module including a motorcycle parking area shall be as follows:</i></p> <p>(a) Measured parallel to the angle of parking—1 in 20 (5%).</p> <p>(b) Measured in any other direction—1 in 16 (6.25%).</p> <p>(c) Within parking spaces for people with disabilities—see AS/NZS 2890.6*.</p> <p>2.4.6.2 Minimum gradients</p> <p><i>So that parking floors will drain adequately, the minimum gradient shall be 1 in 100 (1.0%) for outdoor areas and 1 in 200 (0.5%) for covered areas.</i></p>	Confirmed. Item to be developed under design development.
15.	SD-003		<p>Confirm that the gradients of the accessible parking spaces satisfy the provisions of Clause 2.3 of AS2890.6:2009.</p> <p><i>Each parking space for people with disabilities and related walking and wheelchair unloading areas shall comprise a firm plane surface with a fall not exceeding 1:40 in any direction (1:33 if the surface is a bituminous seal and the parking space is out of doors). These areas shall have a slip-resistant surface.</i></p>	Confirmed. Item to be developed under design development.
16.	SD-003		Should there be parking spaces for motorcycles?	Advise is that parking of bikes would be minimal and can utilise carpark spaces.

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17.	SD-006		<p>There seem to be a problem with the extent of stairs associated with the Discrete Entry / Exit Point.</p> <p>RL35.98 is lower than the designated parking level therefore there will need to be a retaining wall in the landscape zone. This will need to be indicated on the plan.</p> <p>Accessible access will need to be provided from the carpark to the Discrete Entry / Exit Point. It is probable that an AS1735.7 Stairway platform lift will need to be installed.</p> <p>The extent of stairs will need to be reduced to create a connection between the bottom landing and the pathway around the building.</p> <p>The detailing of the stairs will need to satisfy clause 11 & 12 of AS1428.1:2009. Specific attention is directed to the following:</p> <ul style="list-style-type: none"> • Risers and going dimensions will satisfy the requirements of the NCC • The goings shall be non-slip and shall satisfy the requirements of NCC Table D2.14 and HB198 • Nosing shall be fixed to goings and nosing shall be non-slip • Handrails with compliant handrail extensions will need to be installed • Warning TGSIs will need to be installed at the top and bottom of the stair • Lighting of the stair compliant to the minimum lighting levels noted at Clause 19 of AS1428.2:1992 (150lx) 	<p>Ramp not indicated and has since been updated.</p> <p>Item to be developed under design development.</p>
18.	SD-006		<p>There are no RLs on the plan indicating the levels of the carpark in relation to the Coroners parking area and the direct connection to the building. This information will need to be provided.</p>	<p>RL 35.85 – level with the main ground floor.</p>
19.	SD-006	CAFÉ	<ol style="list-style-type: none"> 1. The detailing of the café will need to include a 1m wide path of travel 2. Seating areas will need to comply with the provisions of Clause 24 of AS1428.2:1992 3. The detailing of the service counter can adopt the side on approach of reach ranges (AS1428.2:1992) 4. There will need to be a low threshold detail at the door threshold to the external area 5. The installation of the paving materials of the external areas of the café will need to satisfy the provisions of Clause 7 of AS1428.1:2009 	<p>Noted. Item to be developed under design development. This may be a shall only space.</p>
20.	SD-006	Stair 1	<p>The detailing of Stair 1 will need to satisfy the provisions of Clauses 11 & 12 of AS1428.1:2009.</p> <p>The lighting level on the stair will need to satisfy Clause 19 of AS1428.2:1992 (150 lx)</p>	<p>Noted. Item to be developed under design development.</p>
21.	SD-006	Stair 2	<p>The detailing of Stair 2 will need to satisfy the provisions of Clauses 11 & 12 of AS1428.1:2009.</p> <p>The lighting level on the stair will need to satisfy Clause 19 of AS1428.2:1992 (150 lx)</p>	<p>Noted. Item to be developed under design development.</p>

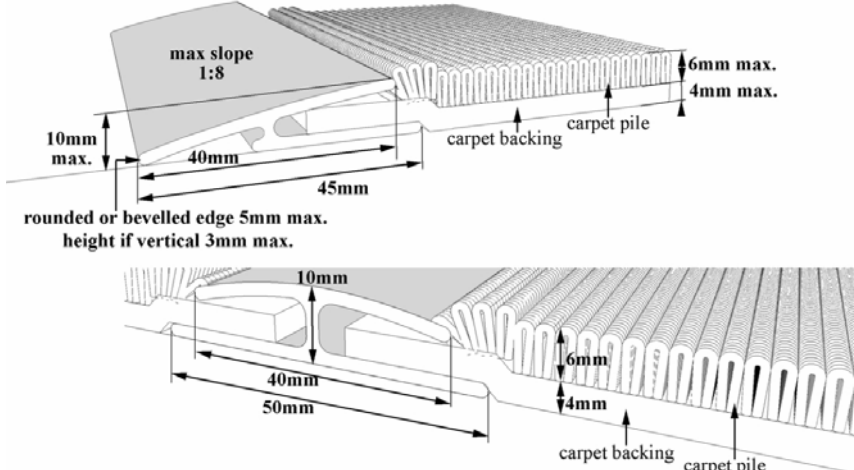
Documentation Review				
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22.	SD-006	Stair 3 & 4	It is assumed that Stairs 3 & 4 are fire stairs and not circulation stairs. The detailing of Stair 3 will need to satisfy the provisions of the NCC and NCC Clause D3.3(a)(iii) which reference the requirements of Clause 11.1 (f) & (g) of AS1428.1:2009	Stairs are fire escapes. Other items to be developed under design development.
23.	SD-006	All stairs	The detailing of the stairs within in this facility will need to be detailed to ensure that there are no vertical sections in the detailing of the handrails (Clause 11.2(c) AS1428.1:2009) Warning TGSIs will need to be installed at the top and bottom of each stair flight. TGSIs are not required at mid-landings. TGSIs are not required for Stairs 3 & 4.	Noted. Item to be developed under design development.
24.	SD-006	Seating area	The profiles of the furniture located in the waiting area will need to satisfy the furniture dimensions noted at Clause 27 of AS1428.2:1992. (Refer attached sheet)	Noted. Item to be developed under design development.
25.	SD-006	Lifts (Grid B1)	The detailing of the lift cars will need to satisfy the requirements of AS1735.12. The minimum lift car size will need to be 1100 x 1400mm as the travel distance is less than 12m. The actual size of the lift cars will need to be determined by the Vertical Transport consultant.	Noted. Item to be developed under design development.
26.	SD-006	Reception	The detailing of the reception counter will need to satisfy the requirements of Clause 24 of AS1428.2:1992 with the provision of a wheelchair zone. If the counter is fully enclosed, then a hearing augmentation system compliant to the provisions of NCC Clause D3.7 will need to be installed. The detailing of the furniture in relation to the doors to the reception area will need to be revised so that the required circulation at doorways requirements of Clause 13 of AS1428.1:2009 can be satisfied.	Noted. Item to be developed under design development.
27.	SD-006	Accessible WC	The detailing of the accessible WC located Within the Reception Zone will need to satisfy the provisions of Clause 15 of AS1428.1:2009. Refer to attached checklist.	Noted. Item to be developed under design development.
28.	SD-006	Turning Area	The minimum width of the corridor to the Teaching Viewing Suite will need to be 1540mm to allow for a wheelchair user to make a 180deg turn. The space required is 1540 x 2070mm.	150mm is achieved.
29.	SD-006	Teaching viewing suite	The paths of travel to the Teaching viewing suite will need to be increased to satisfy the Circulation provisions of AS1428.1:2009. The areas requiring review include: <ul style="list-style-type: none"> • Circulation at the entry door • 1500 x 1500mm 90deg turn along path of travel • Provision of a wheelchair seating zone to satisfy Clause 18 of AS1428.1:2009 	Noted. Item to be developed under design development.

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30.	SD-006	WC Public Facilities	These facilities will need to include for an ambulant cubicle located within each bank of WC facilities. The detailing of the ambulant facilities will need to satisfy the provisions of Clause 16 of AS1428.1:2009.	Noted. Item to be developed under design development.
31.	SD-006	Courtyard - relatives	Accessible access will be required to each of the courtyards. Details as to threshold detail, pavement materials etc will need to be provided.	Noted. Item to be developed under design development.
32.	SD-006	Change rooms	There are no accessible change room facilities proposed within this facility?	Accessible change room facilities included on level one. Further facilities to be incorporated in detail design to the ground floor facilities.
33.	SD-006	Change rooms	The width of the corridor to the doors of the change rooms will need to be increased to satisfy the provisions of Clause 13 of AS1428.1:2009.	Noted. Item to be developed under design development.
34.	SD-006	Change rooms	The space requirements at the dead end of the corridor to the change rooms will need to be increased to provide a 180deg turning zone (1540 x 2070mm)	Noted. Item to be developed under design development.
35.	SD-006	Change Room	Ambulant WC Facilities have been provided within each change room. An accessible shower will need to be provided within each change room to satisfy the provisions of NCC Table F2.4(b) which requires accessible showers to be provided at the rate of 1:10 showers.	Noted. Item to be developed under design development.
36.	SD-006	Doors Generally	All doors to accessible rooms will need to have a minimum clear width of 850mm and will need to satisfy the provisions of Clause 13 of AS1428.1:2990. Where double doors are installed the minimum clear width of the active leaf will need to be 850mm. The force required to operate doors (other than fire doors) fitted with door closers will need to be 20N The placement of vision panels in doors will need to satisfy the provisions of Clause 11.6.2 of AS1428.2:1992 (refer to attached Technical Sheet)	Doors are show at 970mm. Other items to be developed under design development.

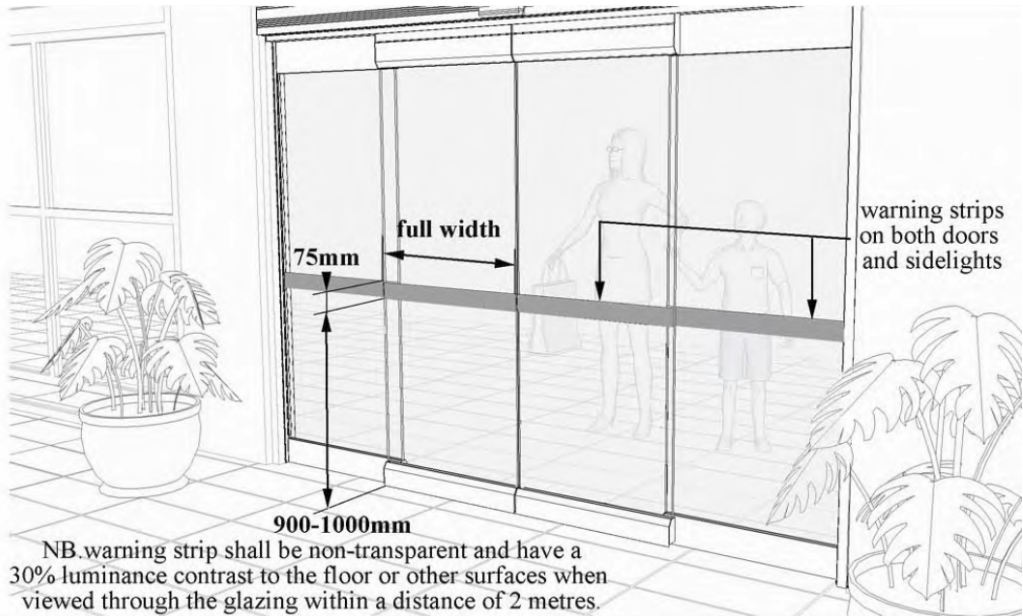
Documentation Review				
No	DWG No	Room	Discussion	Action
37.	SD-007	Public WC Facilities Near Grid C3	<p>The design of these facilities will need to be revised to ensure that an ambulant WC is provided within each bank of facilities.</p> <p>The detailing of the ambulant facilities will need to satisfy Clause 16 of AS1428.1:2009.</p> <p>Braille Tactile signage compliant to NCC Clause D3.6 and NCC Specification D3.6 will need to be installed.</p> <p>Braille tactile directional signage will need to be provided locating the accessible WC.</p>	Noted. Item to be developed under design development.
38.	SD-007	Property Bay WC facilities (Grid F3)	Ambulant WC facilities will need to be provided within this WC facility. The detailing of the ambulant facilities will need to satisfy Clause 16 of AS1428.1:2009.	Noted. Item to be developed under design development.
39.	SD-007	Forensic Admin	The planning of this unit includes a number of dead end corridors. At the dead ends a 180deg turning zone for wheelchair users will need to be provided. The size of the tuning bay will need to be 1540 x 2070mm.	Noted. Item to be developed under design development.
40.	SD-007	Offices	The plans provided do not as yet indicate furniture and joinery arrangements. It will be essential to ensure that the circulation at doorway requirements of Clause 13 of AS1428.1:2009 are satisfied.	Noted. Item to be developed under design development.
41.	SD-008	Courts	<p>The internal arrangements of the courts at this level have not been indicated. The following will need to be satisfied:</p> <ul style="list-style-type: none"> • The circulation at doorways to the courts will need to satisfy the provisions of Clause 13 of AS1428.1:2009 • The design of the airlocks to the courtrooms will need to be revised to provide the 1450mm requirement between doors nominated at Clause 13 of AS1428.1:2009 • The seating within the court will need to include for wheelchair locations (A minimum of 3 spaces will need to be indicated for each courtroom) 	Noted. Item to be developed under design development.

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No	DWG No	Room	Discussion	Action
42.			 <p>Architectural drawings for item 42. The 'TOP VIEW' shows a row of seats with a width of 1760 min and an 'Entrance' area. The 'PLAN - APPROACH FROM THE FRONT' shows a side view of the seating area with dimensions: 330 min, 1700, 800, 2450 min, 1200 min, and an 'Aisle 1000 min.' with a 'Step or top of sloped aisle'.</p>	Noted. Item to be developed under design development.
43.	SD-008	Waiting	The detailing of the furniture in the waiting areas will need to satisfy the requirements of Clause 27 of AS1428.2:1992	Noted. Item to be developed under design development.
44.	SD-008	Ramps	There is no information as to the gradient of the ramps to the coroner's courts. The detailing of the ramps will need to satisfy the requirements of Clause 10 of AS1428.1:2009.	Noted. Item to be developed under design development.

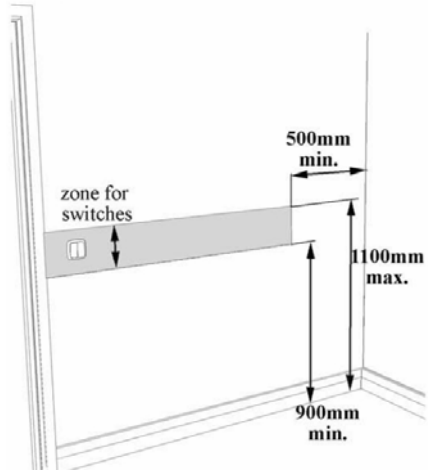
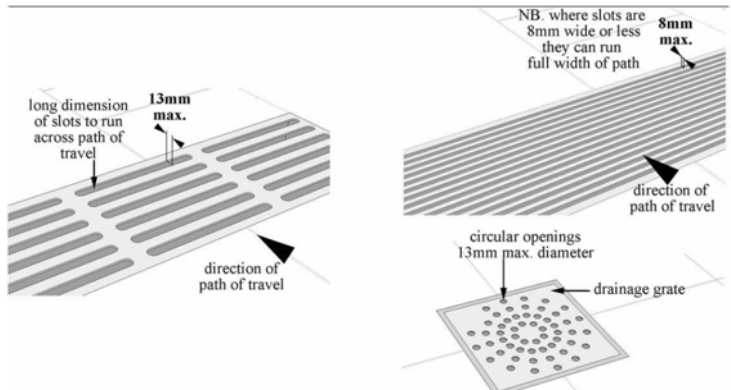
Documentation Review

No	DWG No	Room	Discussion	Action
45.		Carpet	<p>The pile thickness and the intersection of floor finishes will need to satisfy Clause 7 of AS1428.2:2009.</p> 	Noted. Item to be developed under design development.

Documentation Review

No	DWG No	Room	Discussion	Action
46.		Glazing	<p>The glazing associated with doorways or along accessible paths of travel will need to satisfy the provisions of Clause 6.6 of AS1428.1:2009 – Visual Indicators on Glazing.</p>  <p>NB warning strip shall be non-transparent and have a 30% luminance contrast to the floor or other surfaces when viewed through the glazing within a distance of 2 metres.</p>	Noted. Item to be developed under design development.

Documentation Review

No	DWG No	Room	Discussion	Action
47.		Switches	<p>Any switches installed will need to be located within the following zone.</p> <p>(A) Zone for Location of Switches</p> 	Noted. Item to be developed under design development.
48.		Grates	<p>Any grates within paving zones will need to satisfy the following</p>  <p>NB. where slots are 8mm wide or less they can run full width of path</p>	Noted. Item to be developed under design development.